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World Market for Avocado

RAP Market Information Bulletin No. 10

INTRODUCTION

The avocado, also known as the alligator pear, is the fruit of the tree *Persea americana*, of the family Lauraceae. It is green, similar in size and shape to a large pear. High in fat and protein, the avocado's flesh has the consistency of firm butter and a faint nutlike flavor. World trade in avocados has increased greatly during the 1980s and early 1990s, although it has been limited primarily to the United States and Europe. Japan, the most Westernized of Asian countries, has begun to import large volumes of avocados but is the only Asian country to do so as of yet. World production of avocados has increased by 550,000 metric tons during the past 15 years and is now estimated at 2 million metric tons (Table 1). Avocado cultivation is centered in the Americas, with the nations of North and Central America accounting for 60 percent of world production. South America accounts for 18 percent of world production, and Africa and Asia account for about 10 percent each. International trade in avocados, however, is led by Spain, South Africa, and Israel, which have been the world's top three exporters, respectively, since 1993 even though their combined annual production is only 20 percent that of Mexico. North and Central America

PRODUCTION AND EXPORTS

Mexico is the world's largest producer of avocados. In 1994 it produced 718,000 metric tons, equal to the combined 1994 production of the next seven largest producers: the United States, the Dominican Republic, Brazil, Indonesia, Colombia, Venezuela, and Israel. Mexican avocados are harvested year round but reach their peak productivity between October and February. Hass is the major variety produced (80-90 percent of total production), but some Crillo, Fuerte, San Miguel, and Taylor varieties are also available. Because Mexico is also the world's largest consumer of avocados, it exports only 2 percent of its total production. However, exports are predicted to increase in 1995 to 4 percent of production. Several factors have contributed to increasing imports, including the devaluation of the peso; poor weather in major production areas of Israel, South Africa, and Spain; and increased organization and sophistication by Mexican producers. Avocado traders from Europe, South Africa, and the United States have begun active involvement in Mexico's avocado exporting industry.

The **United States** is the world's second-largest producer of avocados, harvesting 168,000 metric tons in 1994. California is the primary growing area (86 percent of total production), followed by Florida (14 percent) and Hawaii (less than 1 percent). The Hass variety is the overwhelming favorite of U.S. avocado growers. In 1994, the United States exported 9,669 metric tons of avocados, primarily to France, Canada, Japan, and the Netherlands (Tables 2 and 3).

South America

Chile produces avocados year round, 55 percent of them Hass and 14 percent Fuerte. Production in 1994 was estimated at 55,000 metric tons, an increase of 31 percent from the previous year. Furthermore, production is forecasted to increase 15 percent annually as new land comes into production. Chile exports 35 percent of the avocados it grows, almost 97 percent to the United States.

Chile is seeking to diversify its export markets in anticipation of more Mexican product being exported to the United States. The Chilean avocado growers' association is urging producers to redirect highest-quality product to Europe and recommending that funds traditionally used for promotion in the United States be applied to promotion in Europe.

Africa

South Africa's production of 49,000 metric tons is relatively small by world standards, but approximately 70 percent of production is exported. Production and exports fell sharply this season because of drought; bad weather; and low yields during the "off-season," an alternate bearing cycle induced by previous high yields. Increased congestion in the country's major ports has further added to exporting difficulties, damaging and delaying shipments of fruit. Unless significant rainfall occurs very soon, yields will continue to drop. To compensate for lower production, the South African label Bella Nova has been sourcing Mexican avocados for European markets.

Hass avocados, which account for 30 percent of overall production, will become even more prevalent as additional production comes on line. Other varieties grown include Fuerte, Ettinger, Pinkerton, and Ryan. South Africa's marketing year extends from March to August. Ninety-five percent of South Africa's avocado exports are directed to Europe.

Kenya grows and exports Fuerte avocados, primarily to France but also to the United Kingdom and Germany. Exports in 1995 (January to June) increased by 8 percent from 1994 exports, mainly because sea shipments increased; for several years, Kenyan producers have been perfecting the necessary technology to ship avocados by sea because air freight charges are too high.

Middle East

Israel produced 50,000 metric tons of avocados in 1994 and exported 41 metric tons during the 1994/1995 season. France is the destination for about half of Israel's exports, the rest being absorbed by other Euro-pean countries such as Germany and the United Kingdom. If projections are correct, Israel will become the world's largest exporter as a result of the 1994/1995 export season. Israeli production is expected to increase even more because more planting is under way. The Government of Israel forecasts exports of 60,000 metric tons by 1997. Ettinger is the most popular variety among consumers in Israel, because it reaches maturity before frost strikes in December and is high yielding. Hass, however, is the preferred export variety to most European markets. Other varieties grown include Pinkerton, a green-skinned avocado said to taste like Hass; Fuerte; Nabal; and Reid. Israel exports product to Europe from October to May.

Spain exports avocados to France and other European countries. However, for the past two growing seasons, high temperatures and chronic lack of water have cut Spanish yields drastically. Production in 1994 stood at a mere 30,000 metric tons, and 50 percent of 1994/1995 Hass plantings reportedly did not produce fruit. Peninsular harvesting occurs between October and June; in the Canary Islands, harvesting runs from September to March. Hass is the primary variety, constituting 80 percent of total production. Bacon and Fuerte are also produced.

Asia

The Food and Agriculture Organization (FAO) of the United Nations estimates that Asian countries produced 180,000 metric tons of avocados in 1994, slightly more than 9 percent of world production (FAO groups Israel within Asia). Indonesia ranks as the fifth-largest producer in the world, with 105,000 metric tons in 1994, but product is primarily for domestic consumption (1993 exports were only 3.2 metric tons). The Philippines produced 24,000 metric tons in 1994, exported to no major markets, and is one of the few nations that has experienced a decline in production during the past 15 years. Thailand and China export relatively small quantities of avocados, but no volume or value statistics are available.

MARKETS

North America

The **United States** imported 23,932 metric tons of avocados, worth US\$30.7 million, in 1994

(Tables 4 and 5 and Figure 1). Chile supplied 77 percent of imports by volume, and the Dominican Republic accounted for most of the remainder (18 percent). Import volume in 1994 was almost three times that of the previous year, but 1 percent less than in 1992. This fluctuation is the result of the cyclical nature of avocado production in the United States: high yields one year generate low fruit bearing the next. The Bahamas was the only supplier that did not experience significantly diminished demand for its product from 1991 to 1994.

Most U.S. imports arrive between September and December, the remainder arriving a month before or after this period. Periods of high imports are generally reflective of periods of low domestic production. Domestic Hass avocados from California received steady high prices at New York's wholesale market in 1994, between US\$35.00 and US\$44.00 per 40-pound carton during the period of low imports, and lower prices from September to November. The highest price paid for imported Dominican product, US\$11.25 per 10-count box, was received in February, when import volume is low.

To date, the only Mexican avocados allowed entry into the continental United States are those transhipped to Canada and Alaska in sealed containers. However, administrative action is pending to allow Mexican avocados to be supplied to 19 non-avocado-producing states and the District of Columbia. If this action is successful, Mexican avocados will be permitted entry only during the winter months. Even so, Mexican supply will certainly be large.

Canada imported 7,916 metric tons of avocados in 1994, worth C\$10.8 million. Imports have increased 16 percent in volume and 20 percent in value during the last five years. The United States and Mexico are the primary suppliers to Canada, which sourced only 2 percent of imports from unlisted other countries in 1994. Most Mexican avocados enter Canada from September to March, reaching highest volume between November and January. The United States supplies Canada with avocados from April to September, its largest shipments arriving between May and August.

Europe

France, the **United Kingdom**, the **Netherlands**, and **Germany** are the top four avocado importers in the European Union (EU). Together, they represent the world's largest import market for avocados, their 1994 imports totaling 104,500 metric tons (US\$114.4 million). Imports in 1994 were 54 percent higher in volume than imports in 1988, but were still somewhat lower in volume than 1992 imports. Primary suppliers to the EU are South Africa, Israel, Mexico, and the United States. Spain is also a major supplier. Typically, Europe is supplied by Spain and Israel from October to May; by South Africa, Kenya, and the United States from April to September, and by Mexico from August through March (see Figure 2).

France is the largest European importer of avocados, with 1994 imports of 78,552 metric tons (US\$84.1 million). The French import market grew by 52 percent in volume from 1988 to 1994, but imports in 1994, though higher than the year before, were 10,000 metric tons below the 1991 level (see Tables 6 and 7, Figure 3).

Israel, Spain, and South Africa, respectively, were the top three suppliers to the French market in 1994, each accounting for between 22 and 23 percent of total import volume. From 1988 to 1994, all three increased their export volume: by 98 percent, 34 percent, and 34 percent, respectively. In 1994, Mexico supplied 20 percent of total import volume and was the only supplier that experienced growth every year. Kenya, though not a major supplier to this market (5 percent of 1994 import volume), nevertheless increased its exports to France by 225 percent from 1988 to 1994.

French imports in 1994 were highest from March to June and from October to December, consistent with European import seasonality. French consumers generally prefer Hass avocados. Average weekly wholesale prices paid in 1994 by French importers for avocados from various countries are shown in Table 8.

The **United Kingdom** imported 15,239 metric tons (US\$15.6 million) of avocados in 1994. The United Kingdom imports most of its volume from extra-EU sources. Although growth in total imports has been relatively flat, the shares of major suppliers have changed significantly. In 1994, South Africa was the top supplier (55 percent of volume), followed by Mexico (13 percent), France (11 percent), and Spain (10 percent). These countries have been able to increase their supply in a relatively stable import market because the Canary Islands, Israel, and the United States have lost market share.

U.K. consumers, unlike most Europeans, have not fully embraced the Hass avocado. Although it is considered a superior "eating" avocado, the dark knobby skin of the Hass has kept some U.K. consumers away as they traditionally prefer green-skinned varieties. Yet because much of the world's production of avocados has switched to Hass, U.K. supermarkets have begun promotional efforts to encourage the consumption of Hass avocados. Wholesalers have not switched to Hass, still preferring Fuerte, but do not control as much of the fresh produce market as the supermarkets do.

Imports in 1994 were highest from April to August, when South Africa supplied most of import volume (83 percent). All other major suppliers timed their exports to arrive early or late in the year. The International Trade Centre's Market News Service reported weekly importer selling prices for South African avocados ranging from £3.75 to £6.00 per 4-kilogram carton. In general, prices were highest in March and April - around £5.50 per carton - and steadiest in August and September at around £4.50. Product from the Canary Islands and Israel sold for comparable prices, but Spanish product generally averaged £1 per carton less.

Although December 1994 figures are still unavailable, import statistics for January through November indicate that the **Netherlands** imported 10,719 metric tons of avocados, worth US\$10.7 million. This tonnage is already 17 percent larger than that of Dutch imports for the whole of 1993. Furthermore, the Netherlands' is the only major EU import market in which demand has expanded each year from 1988 to 1994, rising 177 percent in volume. All major suppliers have increased their supply to this growing market.

South Africa, the top supplier (485 metric tons, US\$669,000) in 1988, increased its volume to 5,693 metric tons (US\$10.4 million) in 1994, raising its market share from 27 percent to 53 percent. Kenya and Spain were the next-largest suppliers. Each supplied 12 percent of imported volume, and each has shown tremendous growth over the seven-year period examined (251 percent and 977 percent in volume, respectively). Mexico was the major supplier to the Netherlands in 1994. Mexican export volume has fluctuated markedly in the last seven years, but 1994 exports were 170 percent higher than 1988 exports.

Germany imported 9,767 metric tons of avocados in 1994, worth US\$10.7 million. German imports now come almost exclusively from other EU countries. France was the top-volume supplier in 1994 (27 percent of total imports), followed by the Netherlands (25 percent) and Italy (15 percent). Kenya (9 percent) and South Africa (7 percent) were the only significant extra-EU suppliers in 1994. Germans generally prefer Fuerte avocados; it is estimated that 80 to 90 percent of imports are Fuerte. However, traders report that demand for Hass has risen recently.

Asia

Japan is the only Asian nation that imports large volumes of avocados. Japanese imports in 1994 totaled 3,741 metric tons, worth ¥972.4 million (US\$9.5 million), as shown in Tables 9 and 10 and Figure 4. All product that year was sourced from Mexico and the United States, which supplied 65 percent and 35 percent of volume, respectively. Although Mexico supplied in greater volume, the United States received much higher value for its product; supply from the United States accounted for 49 percent of total import value. Japanese imports have increased 73 percent in volume since 1990.

Japanese imports arrive on a schedule that reflects the country's top two suppliers' global marketing seasons. Mexican avocados arrive in volume from September to December, and U.S. avocados arrive from February through September. In July 1995, ¥150 (US\$1.75) per avocado was one major retailer's selling price for California product.

The second-largest reported importer of avocados in Asia is **Hong Kong**. Hong Kong imported 663 metric tons of avocados, worth HK\$5.3 million (US\$686,500), in 1993 (see Tables 11 and 12). Thailand is the top supplier, accounting for 71 percent of import volume and 83 percent of value. Taiwan was the second-largest supplier (accounting for 17 percent of imported volume), followed by China (12 percent) and very small quantities from New Zealand. Consumers in Hong Kong have very little experience with avocados.

Korea, Taiwan, China, and Singapore import avocados in relatively small quantities. With 1993 imports of 26 metric tons (US\$91,300), Korea is the largest importer in this group. All but 4 percent

of total imported value was sourced from the United States, the remainder coming from New Zealand. This import market grew by 36 percent in volume from 1990 to 1993. Taiwan imported 15.4 metric tons (US\$16,300) in 1994. Thailand accounted for 69 percent of total import volume, but only 23 percent of total value. The United States, the only other supplier, supplied far less volume than Thailand but received higher import value. China reportedly imported only 1.6 metric tons of avocados (US\$11,000) in 1993.

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